

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

- 1 1. (Currently Amended) A processor-based method for determining difficulty measures for
2 training cases used in developing a solution to a problem, comprising:
3 providing a set of training cases having respectively associated difficulty measures;
4 operating, by a processor, a candidate solution on a particular training case;
5 determining, by the processor, a performance measure of the candidate solution operating
6 on the particular training case;
7 determining, by the processor, a credibility rating of the candidate solution, the credibility
8 rating indicating a degree to which the performance measure is representative of the difficulty
9 measure of the particular training case; and
10 modifying, by the processor, the difficulty measure of the particular training case based
11 on the performance measure of the candidate solution operating on the particular training case
12 and the credibility rating of the candidate solution.
- 1 2. (Original) The method of claim 1, wherein determining the credibility rating comprises:
2 selecting one or more training cases from the set of training cases based on the difficulty
3 measures of the one or more training cases;
4 determining performance measures of the candidate solution operating on each of the one
5 or more training cases; and
6 computing the credibility rating based on the performance measures of the candidate
7 solution operating on each of the one or more training cases.
- 1 3. (Currently Amended) The method of claim 2, wherein the one or more training cases
2 does not include the particular training case, and wherein the credibility rating is based on the
3 performance measures of the candidate solution operating on each of the one or more training
4 cases not including the particular training case.

1 4. (Original) The method of claim 1, wherein providing the set of training cases having
2 respectively associated difficulty measures comprises initializing a difficulty measure of each
3 training case in the set of training cases to a predetermined value.

1 5. (Original) The method of claim 4, wherein the predetermined value is a maximum value.

1 6. (Currently Amended) The method of claim 8[[1]], wherein:
2 providing the set of training cases comprises associating each training case in the set of
3 training cases with a target output;
4 operating the candidate solution on the particular training case comprises obtaining an
5 output from the candidate solution operating on the particular training case; and
6 determining the performance measure of the candidate solution operating on the
7 particular training ~~case~~ ^{cases} comprises comparing the candidate solution output to a target output
8 of the particular training case.

1 7. (Original) The method of claim 6, wherein comparing the candidate solution output to
2 the target output of the particular training case comprises calculating a value corresponding to a
3 deviation between the candidate solution output and the target output of the particular training
4 case.

1 8. (Original) The method of claim 1, wherein modifying the difficulty measure of the
2 particular training case comprises modifying the difficulty measure based on a weighted average
3 of the performance measure and a previous value of the difficulty measure.

1 9. (Original) The method of claim 8, wherein a weight of the weighted average is based on
2 the credibility rating and a base learning rate.

1 10. (Original) The method of claim 1, wherein modifying the difficulty measure comprises
2 maintaining the difficulty measure within a predetermined interval.

1 11. – 30. (Cancelled).

1 31. (New) The method of claim 8, wherein the performance measure of the candidate
2 solution operating on the particular training case is computed without including training cases in
3 the set other than the particular training case.

1 32. (New) A system comprising:
2 an input section to provide a set of training cases and a candidate solution, wherein the
3 training cases in the set are respectively associated with difficulty measures; and
4 a processor to:
5 operate a candidate solution on a particular one of the training cases;
6 determine a performance measure of the candidate solution operating on the
7 particular training case;
8 determine a credibility rating of the candidate solution, the credibility rating
9 indicating a degree to which the performance measure is representative of the difficulty measure
10 of the particular training case; and
11 modify the difficulty measure of the particular training case based on the
12 performance measure of the candidate solution operating on the particular training case and the
13 credibility rating of the candidate solution.

1 33. (New) The system of claim 32, wherein the credibility rating is determined by:
2 selecting one or more training cases from the set of training cases based on the difficulty
3 measures of the one or more training cases;
4 determining performance measures of the candidate solution operating on each of the one
5 or more training cases; and
6 computing the credibility rating based on the performance measures of the candidate
7 solution operating on each of the one or more training cases.

1 34. (New) The system of claim 33, wherein the one or more training cases does not include
2 the particular training case, and wherein the credibility rating is based on the performance
3 measures of the candidate solution operating on each of the one or more training cases not
4 including the particular training case.

1 35. (New) The system of claim 32, wherein the difficulty measure of the particular training
2 case is modified based on a weighted average of the performance measure and a previous value
3 of the difficulty measure.

1 36. (New) The system of claim 35, wherein:
2 each training case in the set of training cases is associated with a target output;
3 the candidate solution operating on the particular training case obtains an output; and
4 the performance measure of the candidate solution operating on the particular training
5 cases is determined by comparing the candidate solution output to a target output of the
6 particular training case.

1 37. (New) The system of claim 36, wherein the candidate solution output is compared to the
2 target output of the particular training case by calculating a value corresponding to a deviation
3 between the candidate solution output and the target output of the particular training case.

1 38. (New) The system of claim 35, wherein a weight of the weighted average is based on the
2 credibility rating and a base learning rate.

1 39. (New) The system of claim 32, wherein the performance measure of the candidate
2 solution operating on the particular training case is computed without including training cases in
3 the set other than the particular training case.